

RE: Human Health Conceptual Site Model for Operable Unit 3 – Process Areas, Yerington Mine Site, NV. Techn Memo 1 dated September 23, 2015.

The Yerington Paiute Tribe has requested that McGinnis and Associates provide interim comments on this memo to support the development of risk assessment documents for the Anaconda Mine Site. The Tribal Trust Property includes portions of the site (OU7) and due to the proximity of Yerington Paiute Tribe Reservation and Colony to all of the Anaconda Mine Site, the Tribe has an interest in actions at the site to protect the health of its members and its cultural and natural resources.

Providing for an open process to develop these documents is appreciated. The Tribe has emphasized that their use of potentially effected resources can be different than non-Tribal communities. The use of many resources important to Tribal members can result in different levels and pathways of exposure than the non-Tribal community.

Our comments are provided below and, for ease of review, are matched to the “Item” list in the document.

Again, we appreciate this opportunity to provide input regarding development of the document. As per our conversation, the Tribe will provide comments on a later version of this document that may include additional input not included in this less formal review.

Item 3: Future use of the site

Comment 3a. The comprehensive Master Plan in Lyon County does change: an example is the Comstock Mine. In this case, a Suburban Residential land use designation was changed to Resource and Rural Residential by the Lyon County Commission, although the request had been denied by the Planning Commission following Lyon County Planning Department recommendation for denial. It should be noted that the Comstock Mine is on the Carson River Superfund Site; along with being in the same county, it is nearly an identical situation to the Anaconda Mine Site. Dependence on current CMP components should be revised to address the potential implication as well as the recent history of such changes in the county.

Comment 3b. There are no real institutional restrictions such as deed restrictions for this property.

Comment 3c. It should be noted that parcels adjacent to the mine are residential. This includes homes at a lower elevation subject to potential storm runoff and downwind from the prevailing wind direction from OU3. With a history of significant dust issues at the site, trespass due to poor security, no comprehensive storm water

management plan and the minimal and in some case absent barriers to migration of contaminated materials from the site there are many factors that make the industrial scenario as discussed overly optimistic and likely not applicable.

Comment 3d. The Mason Valley Environmental Committee is not part of the County Planning Department and has no direct influence over planning or land use. The reference to MVEC overstates their role in this process.

Comment 3e. Stating that “Any changes to current zoning in Lyon County must be consistent with the CMP land use map” is incorrect despite the extensive public input and administrative effort to develop the plan (see 3a). In addition, the Process Areas OU documents or documents produced by MVEC as indicated in 3d above are not the type of documents generally referenced in normal land use planning processes and are not enforceable standards.

Comment 3d. The statement:

“In addition to reliance on current land use, ownership, environmental covenants, the CMP, the RMP, and EPA’s Site reuse assessment, assumption of future industrial use for the purpose of risk assessment is supported by EPA’s (1995) discussion of land use considerations with remedy selection, which states: “future industrial land use is likely to be a reasonable assumption where a site is currently used for industrial purposes, is located in an area where the surroundings are zoned for industrial use, and the comprehensive plan predicts the site will continue to be used for industrial purposes.”

is incorrect. As indicated in the paragraphs above, the site is not “located in an area where the surroundings are zoned for industrial use.” Adjacent areas are zoned suburban (Weed Heights), agricultural rural and low density residential et cetera. It is recognized that the statement is referenced from another, EPA, document but the data presented in this memo indicates the error in that reference.

Comment 3e. It is inaccurate to use the general population scenario descriptions such as the following referenced from the 1989 EPA risk guidance, “If the site is industrial and is located in a very rural area with a low population density and projected low growth...” to discuss risk potential when population growth calculations are not referenced for the City of Yerington or Lyon County in general. City and County efforts to increase economic development and thereby residential populations, potentially including the residential population of the adjacent Weed Heights, should be included in the assessment discussion.

Item 3 Conclusion:

In this case, the future land use is not certain. Land use adjacent to the site, the absence of institutional controls and the recent history of Lyon County Land use related to CERLA sites in residential areas is overwhelming evidence of the opposite conclusion.

If future industrial or commercial use is to be assumed, a list of future actions expected for the site such as institutional controls, improvements in security, land purchase to create a buffer with associated changes in zoning et cetera would have to be scheduled with some certainty and options for deviation from these plans included. In reality, the risk assessment will not be able to assume industrial or commercial use without additional actions that have not been proposed for the site.

Item 4. Exposure Media

- Comment 4a. Is there any stormwater management for the area? This is important since the length of time that contaminated surface water remains on the site can be a factor. In this case, in the absence of data on length of time contaminated surface water may remain onsite after storm events or snow melt. Ephemeral pooled waters should be primary and not secondary routes for outdoor workers and trespassers.
- Comment 4b. It is generally agreed that exposure to groundwater in the area of OU3 is limited. However, there are no institutional control discussed that would actually limit the installation of wells beyond general limits from the State of Nevada that do not address the site specific environmental issues. Additional language to describe the role of this situation and risk assessment associated with OU1 may be able to correct the deficiency.
- Comment 4c. There is data regarding petroleum hydrocarbons and other volatile contaminants of concern in OU3. This will need to be reviewed to determine if vapors in outdoor air is a potential primary route for construction workers and trespassers.

Item 5. Receptor Populations

- Comment 5a. Please see comments for Section 3 above regarding residents.
- Comment 5b. Security at the site is incomplete now and the area serves as an attractive nuisance. This includes recreational use of the site by off-road enthusiast et cetera. Recreational users will need to be included.
- Comment 5c. Deer are routinely noted at the site including the process area (Figure 1). In addition, migratory waterfowl are routinely noted onsite and could come in contact with surface water in OU3. These animals are harvested by local residents usually offsite but that pathway and receptor population is not included.
- Comment 5d. The statement:

“A worker performing long-term, sustained activities outdoors is not a probable population of concern for the Process Areas OU. Outdoor activities are likely limited to those described in Section 5.1.2.”

requires revision. If a likely scenario for the site is mining, there are workers involved in sustained activities outdoors. There is not a scenario presented that would restrict future mining activities or other industrial activities with sustained activities outdoors from OU3. Historically, the area likely included a larger sustained population of workers than the other OUs.

Comment 5e. The statement:

“Office workers in the Process Areas OU spend all or most of their time indoors analyzing drilling cores or performing administrative duties. Potentially complete, primary exposure pathways for indoor workers include:

- Incidental ingestion of and dermal contact with surface soil as indoor dust*

- Inhalation of particulates and vapors and radon in indoor air*

The indoor office worker is not likely to perform outdoor activities and have direct contact with soil.

requires revision. An indoor employee analyzing drilling cores does have direct contact with soil since that scenario implies the future use as a mine and there is no reason OU3 would not be part of a future evaluation for mining.

Comment 5f. The statement:

“Access to the entire Site, including the Process Areas OU, is restricted; however, unauthorized visitors (i.e., trespassers) have historically entered the Process Areas OU to unlawfully collect scrap metal and other materials and equipment. Because the Process Areas OU is not located near or adjacent to a residential area, it is assumed that the trespasser is a young adult or adult as opposed to a young child.”

needs to be corrected to better reflect site conditions and history. As indicated in Figures 2 and 3, access control is less than found at other Nevada mine sites and child trespassers likely not collecting scrap metal are using the site. In addition, with the large number of homes within walking distance of the site, it cannot be assumed that the child and young adult trespasser is spending “limited time” onsite.



Figure 1. Deer moving into the process area. Note residential area, Weed Heights, in the background.



Figure 2. Chain link, barbed wire topped fence with warning sign at the Cordera mine site near McDermitt, Nevada.



Figure 3. Children trespassing on the Anaconda Mine Site. Note minimal fence in the foreground, near side of the fence is the backyard of a home adjacent to the home.